

Remarks

In the present Office Action, the Examiner maintained her rejection of claims 1 through 10 and 12 through 19 as being anticipated by US Published Application US 2002/0176936 (hereinafter the '936 publication), as well as her rejection of claims 1 through 7, 10 and 12 through 20 as being anticipated by US Patent 5,919,520 (hereinafter the '520 patent). Likewise, the Examiner maintained her rejection of claims 8 and 9 as being unpatentable over the '520 patent in view of the '936 publication, as well as her rejection of claim 11 as being unpatentable over the '936 publication in view of US Patent 7,077,910.

Rejections under 35 USC 102

Each of the independent claims 1, 5, 14, 16 and 20 requires that a control fluid be imparted to a portion of the deposited resist. The Examiner indicates on page 3 of the present Office Action that the term "control fluid" has been given its broadest reasonable interpretation, and that such includes the liquid solvent of the '936 publication (shown in FIG. 7 thereof) and the '520 patent (shown in FIG. 2 thereof), both of which are used to improve wettability of the resist layer to be deposited.

The approach used by the Examiner is incorrect, as MPEP 2111 clearly requires not an unmoored "broadest reasonable interpretation" but a broadest reasonable interpretation that is consistent with the specification. Implicit in this last clause omitted by the Examiner is the context-dependent nature of what is reasonable. In the present application, the Applicant unequivocally sets forth what such context is, noting with particularity at page 3, lines 25 through 27 of the original specification that the term "control fluid" includes an air source or inert gas, the latter such as nitrogen, argon or the like. The original specification further states at page 5, lines 6 through 7 that the "control fluid coming out of the fluid supply can be air or another gas", while page 5, lines 17 through 21 state that the control fluid is "an airflow supply fluidly coupled to the resist that has been deposited onto a generally upper surface of the wafer chuck such that upon impingement of the airflow onto a desired part of the resist, the airflow produces a localized change in evaporation rate of the deposited resist relative to portions of the resist that are not substantially exposed to the impingement" Furthermore, page 11, lines 17

through 20 indicate that in "one preferred form, air is the control fluid, although it will be appreciated that other control fluids can be used besides air" and that "substantially inert gases (such as argon, nitrogen or the like) could be used in situations where contaminants in the air, or the air's inherent reactivity due to its substantial oxygen presence, may preclude its use." Lastly, by the previous response (which was filed on March 13, 2008) and the instant response, the Applicant indicates the gaseous nature of the control fluid.

Thus, had the Applicant chose to include liquids as a viable control fluid (which would in fact have led to the default pedestrian interpretation adopted by the Examiner), he could have done so. Instead, he did not, thereby depriving the Examiner of the ability to resort to unfounded speculation as to the nature of the control fluid. In fact, the only place where the term "liquid" appears in the original specification is on page 1, line 25, and is limited to discussion of the deposited resist layer, not the gaseous control fluid.

By failing to reconcile the clause "control fluid" with the specification, the Examiner deviates from the well-established USPTO practice mentioned in *Phillips v. AWH Corp.*, 75 USPQ2d 1321, 1327-28 (Fed. Cir. 2005), noting that the specification is "the single best guide to the meaning of a disputed term" (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 39 USPQ2d 1573 (Fed. Cir. 1996)) and that the specification is "the primary basis for construing the claims" (quoting *Standard Oil Co. v. American Cyanamid Co.*, 227 USPQ 293 (Fed. Cir. 1985)). The *Phillips* court went on to note that the specification may reveal an intentional disclaimer or disavowal of the claim scope. *Id.* at 1329. Likewise, the *Phillips* court noted that in addition to consulting the specification, a court should also consider the prosecution history, as it provides evidence of how the Examiner and the inventor understood the terms used in the application. *Id.*

Given this well-established authority, the Examiner must construe the term "control fluid" and its related supply in the manner set forth in the specification, as well as in this and the Applicant's previous response, *viz.*, as a gaseous fluid that through localized impingement onto the surface of an already-deposited resist layer changes the rate of evaporation of the deposited resist through manipulation of an already-deposited liquid solvent. Upon proper interpretation of

the claim terms through the guidance provided by MPEP 2111 and *Phillips*, the Examiner must come to the inescapable conclusion that the present anticipatory rejections of claims 1 through 10 and 12 through 20 are not well-taken, and should be withdrawn.

Rejections under 35 USC 103

The Examiner rejected claim 11 as being obvious over the '936 publication in view of US Patent 7,077,910 (hereinafter the '910 patent). The Examiner additionally rejected claims 8 through 10 as being obvious over the '520 patent in view of the '936 publication. The Applicant respectfully traverses the present rejection.

"To establish a *prima facie* case of obviousness, three basic criteria must be met." MPEP 2143. One of the requirements is that all of the claim limitations must be taught or suggested. MPEP 2143.03. Since there is nothing in any of the cited references that teaches or suggests all of the features of the independent claims (most notably, the control fluid supply discussed above), a *prima facie* case for obviousness has not been made out. Accordingly, the Applicant submits that the present rejection of claims 8 through 11, all of which depend from independent claim 1 (which is allowable for the reasons articulated above), are additionally allowable.

The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,
DINSMORE & SHOHL L.L.P.

By /John D. Reed/
John D. Reed
Registration No. 46,506

One Dayton Centre
One South Main Street, Suite 1300
Dayton, Ohio 45402-2023
Telephone: (937) 449-6453
Facsimile: (937) 449-6405